Remarks

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested.

Initially, it is noted that withdrawn claims 8 and 14 have been canceled without prejudice or disclaimer to the subject matter contained therein.

Further, new claims 15 and 16 have been added.

Claim 9 has been rejected under 35 U.S.C. §102(b) as being anticipated by Maeda (US 6,272,085). Claim 10 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Maeda in view of Mine (US 5,966,358).

Claim 9 has been amended so as to further distinguish the present invention from the references relied upon in the above-mentioned rejections. Further, claim 10 has been amended so as to change the term "data" to "disc."

The above-mentioned rejections are submitted to be inapplicable to the amended and new claims for the following reasons.

Claim 9 is patentable over Maeda, since claim 9 recites an optical disc recording method for recording data to a multi-layer optical disc having at least a first data recording layer and a second data recording layer, the optical data recording method including, in part, recording dummy data to an area determined to be unrecordable on the first data recording layer, which is located closer to a laser beam source than the second data recording layer, to unify transmittance of the first data recording layer. Maeda fails to disclose or suggest the recording of dummy data as recited in claim 9.

Maeda discloses a method for recording data to a redundant array of inexpensive disks (RAID) 10 made up of a number of hard disk drives (HDDs) of a single layer. In a case where data is to be written to the RAID 10, a designated range within the RAID 10 where the data is to be stored is determined. When one or more defective sectors are included in the designated range, dummy data is assigned at data portions corresponding to the defective sectors. Therefore, when the data and the dummy data are written to the RAID 10, the data is written to the good sectors in the designated range of the RAID 10 and the dummy data is written to the defective sectors in the designated range. By recording data using the above-described method, Maeda is able to eliminate the need to perform skip operations to jump over the defective

sectors, which results in the minimization of data access time during recording. (See column 13, line 52 – column 14, line 65).

As discussed above, Maeda does disclose that dummy data is written to the defective sectors in the RAID 10. However, it is also apparent that Maeda fails to disclose or suggest that any of the HDDs that make up the RAID 10 include a first data recording layer and a second recording layer. Therefore, Maeda necessarily fails to disclose or suggest that the dummy data written to the defective sectors in the RAID 10 are on a first data recording layer, which is located closer to a laser beam source than a second data recording layer.

Further, there is no disclosure or suggestion in Maeda that the dummy data written to the defective sectors unifies the transmittance of the first data recording layer. Instead, the dummy data in Maeda is written to the defective sectors in the RAID 10 so as to eliminate the need to perform time-consuming jump operations to skip the defective sectors. As a result, it is apparent that Maeda fails to disclose or suggest these features of claim 9.

As for Mine, it discloses an apparatus 1 that includes a recording section 10, a control section 20, and an address control section 30 for recording moving picture data to an optical disc recording medium. However, it is apparent that Mine also fails to disclose or suggest the above-discussed features of claim 9.

One of benefits of the present invention as recited in claim 9 is that it unifies the transmittance of the first data recording layer through which a laser beam is to pass to reach the second data recording layer. If an unrecordable area on the first data recording layer is not recorded with dummy data, the surface of the unrecordable area remains clean and unmarked, while the neighboring areas are marked with recorded data. Therefore, the light transmittance of the unrecordable area becomes high compared to that of the neighboring areas. When the second data recording layer is read or written to by the laser beam passing through the first data recording layer, the laser beam impinging on the second data recording layer abruptly increases at the areas corresponding to the unrecordable area of the first data recording layer. This increase in laser light, in turn, can cause the reading or writing to the second data recording layer to become unstable. In order to avoid this problem, the present invention writes the dummy data to the unrecordable area of the first data recording layer.

Regarding claim 15, it is patentable over the references for reasons similar to those discussed above in support of claim 9. That is, claim 15 recites, in part, an optical disc recording

apparatus including, in part, an arrangement operable to record dummy data to an area determined to be unrecordable on a first data recording layer, which is located closer to a laser beam source than a second data recording layer, to unify transmittance of the first data recording layer, which feature is not disclosed or suggested by the references.

Because of the above-mentioned distinctions, it is believed clear that claims 9, 10, 15 and 16 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 9, 10, 15 and 16. Therefore, it is submitted that claims 9, 10, 15 and 16 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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